



MOU ON EFFICIENT WATER MANAGEMENT PRACTICES BY CALIFORNIA AGRICULTURAL WATER SUPPLIERS – CAN IT WORK?

Roger L. Reynolds¹

Tracy Slavin²

ABSTRACT

In September 1990, AB 3616, "The Agricultural Water Suppliers Act," became law in California. This law required the Department of Water Resources (DWR) to establish an advisory committee to review and study potential Efficient Water Management Practices (EWMPs) and to determine which were feasible for achieving water conservation. The advisory committee was comprised of representatives of the California farming community, agricultural water suppliers, the Department of Food and Agriculture, the University of California, the California State University, public interest groups, and other interested parties.

During 1992, the last year of California's six year drought, Governor Wilson, in a speech discussing California's water needs, referred to the many water conservation practices developed by California's farmers and expressed his support for the development of EWMPs for agricultural water use. He further emphasized the AB 3616 Advisory Committee should develop a strategy for implementing these practices.

An Urban Memorandum of Understanding (MOU) had recently been signed by urban water suppliers and public interest groups (environmentalists). The urban signatories committed to implement certain Best Management Practices during a specific time frame to help reduce future demand and conserve water supplies. The Governor was hopeful a similar MOU could be developed for agricultural water suppliers which would encourage further improvements in water management.

The Governor's directive changed the purpose of the AB 3616 Advisory

¹ Senior Engineer, Summers Engineering, Inc., P.O. Box 1122, Hanford, California 93232

² Water Conservation Specialist, USBR Mid Pacific Region, 2800 Cottage Way, Sacramento, California 95825

Committee. Not only was a list of efficient water management practices to be prepared, but a document was also needed which outlined a reasonable implementation plan acceptable to both agricultural and environmental representatives.

Since 1992, the Advisory Committee members have been working to develop an acceptable MOU. There have been many meetings, disagreements, and at times uncertainty over whether a workable product could be developed. The Advisory Committee approved the Final Draft MOU on October 15, 1996. Can it work and will it be effective in further improving agricultural water management or is it just another layer of bureaucracy? This paper will discuss the process followed, areas of disagreement, and what steps were taken to reach a consensus.

BACKGROUND

From 1987 through 1992 California experienced a prolonged and devastating drought. Precipitation and surface runoff during this six (6) year period were the lowest for any comparable period in recorded history. Both agriculture and urban areas dependent on surface water supplies were severely impacted. Carryover reservoir storage during the first few years minimized the impacts but as the drought continued water suppliers were required to significantly cut back on deliveries. Many agricultural State Water Project and Federal Contractors had their surface water supplies cut by 80 to 90 percent for a few years and some did not receive any surface water at all during 1991. Agricultural lands were fallowed and water rationing was the norm as supplies were stretched to meet both urban and agricultural requirements. The economic impacts were severe in both the urban and agricultural arenas. Water rationing and conservation were terms commonly mentioned and all water users were urged to use their water supplies in the most efficient manner possible.

The water shortage and water supply restrictions in the urban areas encouraged pointed attacks on agriculture's water use and water application efficiency. Since agriculture controls and utilizes approximately 80 percent of California's developed water supply, a comment often heard was, "If agriculture conserved only 10 percent on water use, all urban areas of the state would have plenty of water to meet their present and future water demands." The implication was that agriculture was not efficiently using its water supply, and it would be a straightforward procedure for agriculture to reduce its water use by 10 percent.

The drought and resulting reduced instream flows into the San Joaquin - Bay Delta increased the comments and concerns from San Francisco - Bay Area

environmentalists that agricultural and urban water suppliers were wasteful in their use of water. Questions were also raised regarding the production of rice, alfalfa and other high water use crops. People wondered if it was economically feasible to continue the production of these crops in water short California when urban and industrial areas were experiencing severe economic impacts and restrictions on growth due to water rationing.

It was during the last two years of the drought, during the fall of 1990, that Assembly Bill NO. 3616 was signed into law. The primary emphasis of AB 3616 was for the Department of Water Resources (DWR) to establish an Advisory Committee to study and periodically review potential Efficient Water Management Practices (EWMPs) to determine which would be feasible to implement to achieve improved water conservation.

INITIAL AB 3616 ADVISORY COMMITTEE MEETINGS

The initial meetings of the Advisory Committee began in 1991. The meetings were chaired by the Chief of the Department of Water Resources - Office of Water Conservation. Membership on the committee, in accordance with the bill, included representatives of the farming community, agriculture water suppliers, Department of Food and Agriculture, the University of California and California State University system, public interest groups (environmentalists) and other interested parties. The first meetings were typically attended by less than 25 representatives from the above-mentioned groups.

In attempting to establish an agreed to list of EWMPs for agricultural water suppliers, representatives often split into two factions, agricultural and environmental, debating over the need for various EWMPs. The environmental representatives argued that water conservation should be achieved by implementing mandatory practices such as water metering, lining or piping canals, automating water supplier operations, and raising the cost of water. Even in a water deficient area, they supported the implementation of some type of tiered water pricing that increased the rate structure when more water was used. They mentioned it worked for the electrical power industry and it should work just as well for agriculture. The agricultural representatives from all areas of the state were often put into a defensive position explaining how irrigation occurs and how water rates were established in their respective service areas. They also described conjunctive use practices and the balance needed in water rates to prevent farmers from switching from surface water to groundwater. They emphasized the need to charge less for water in a wet year to help encourage increased recharge. Many of the environmental representatives did not have a basic understanding of irrigation

and crop water requirements. They did not understand that in areas where available surface water supplies were not adequate to meet crop water requirements a tiered water pricing plan would not help reduce water usage.

The initial meetings often resulted in debate, division, and some animosity between the various representatives. This process was very frustrating and although unproductive, continued from meeting to meeting. Agricultural representatives attended the meetings hoping to establish a reasonable list of EWMPs, fearful that an unreasonable list of EWMPs might become mandatory by future legislation. Environmental representatives, primarily from the San Francisco Bay Area, continued to attend hoping to rectify what they perceived were water wasting practices in agriculture which if addressed could help improve water quality concerns and ecosystem problems in the San Francisco Bay-Delta.

During the fall of 1991, urban water agencies implemented their Memorandum of Understanding Regarding Urban Water Conservation in California. This MOU was a consensus effort developed by urban agencies working in concert with environmental organizations. The purpose was to encourage the implementation of Best Management Practices which would conserve existing urban water supplies and reduce long term urban water demands while protecting the environment.

GOVERNOR'S WATER SPEECH

In April 1992, Governor Wilson, in what has become known as his "Water Policy Speech," stated he supported the development of the Urban MOU and that he strongly supported the development of agricultural EWMPs and a comparable consensus MOU between agricultural, environmental, and other representatives. He added that an implementation plan should be developed by the committee presently working on agricultural EWMPs (the AB 3616 Advisory Committee) by the end of 1992.

The Governor's directive dramatically changed the AB 3616 Advisory Committee's charge from just developing a list of EWMPs to developing a workable agricultural MOU which would encourage the implementation of EWMPs by water suppliers and hopefully further improve water management where possible. The directive gave new purpose to the committee. A retired U.C. Extension Service Farm Advisor was named Chairman of the Advisory Committee, and was directed by the Director of the Department of Water Resources to proceed with the development of an acceptable MOU which would have broad-based support.

The Governor's speech came at the end of the six-year California drought. His proposal appeared to be an attempt to end the water wars and promote a cooperative understanding and consensus on state agricultural water issues among the various interested parties.

ADVISORY COMMITTEE MEETINGS WITH NEGOTIATION FOCUS

AB 3616 Advisory Committee meetings, under the new leadership, changed in scope, content, and purpose. An increased number of agricultural, environmental, and government representatives initially began attending the first few meetings curious to see what would happen. Other than the Governor's speech, the committee had no specific instructions or goals on what should be accomplished. Negotiations were required to understand all the expectations and concerns of the different participants. The environmentalists looked to the Urban MOU and felt a future Agricultural MOU should be modeled after it with specific implementation objectives and performance goals required. The agricultural representatives were coming to the table generally skeptical regarding performance goals of any type and uncertain regarding what the future MOU should contain, but anxious to stay involved to defend and protect their existing water use practices, and rights. Due to the large number of people in attendance, a recommendation was made to establish a drafting subcommittee with equal numbers of agricultural and environmental representatives (six members from each side) to begin the negotiating process for an MOU. These meetings began with an attempt to determine the areas of agreement and any outstanding issues between the two groups. Meetings continued during the summer and fall of 1992 with the drafting subcommittee identifying issues of agreement and disagreement.

During this time period the agricultural and environmental representatives each held separate caucus meetings to discuss the issues and reach consensus within their own group. Some of the issues in dispute or in disagreement included the following:

1. The environmental (enviro) representatives wanted an MOU that required implementation of all EWMPs unless a detailed economic and environmental analysis exempted the water supplier from implementing the practice. They wanted assurances that justified EWMPs would be implemented and not summarily dismissed. They wanted to limit the ability of a board of directors from saying no, they wouldn't implement a given practice. Agricultural (ag) representatives said they would be willing to implement a given EWMP only if it was cost effective to do so. The ag representatives also wanted some flexibility in any implementation requirements due to regional variations in water use practices. They also emphasized a water supplier board must have

the ability to make the final decision on implementation of a given practice.

2. The enviros thought water measurement should be a required EWMP not dependent on any analysis for implementation. They felt a volumetric meter at every farm and field should be installed. Ag stated that measurement may be beneficial, but potential water savings might not justify the cost of installing volumetric measuring device and therefore, analysis before implementation was needed. There was also a similar disagreement regarding water pricing.

3. The enviros were concerned about subsurface drainage problems and impacts to wildlife documented in numerous drainage studies following the Kesterson Reservoir fiasco. In essence, enviros wanted to stop or restrict all on farm drainage as much as possible. The ag representatives emphasized that drainage included surface and subsurface drainage issues and problems were different for each. Ag also emphasized drainage was not a water supplier problem but an on-farm problem which should be addressed in a different format.

4. There was also concern on whether or not the MOU should be written with all water suppliers in mind or should it be geared for the larger agencies that exceed a certain size or use of water.

During one of the agricultural caucus meetings it was recommended that a series of tours be held in the various agricultural areas to help educate subcommittee members on existing water management and water use practices in California. Tours were planned by the ag representatives for nine different farming areas from the Sacramento Valley, various regions of the San Joaquin Valley, and the Imperial and Coachella Valleys. Subcommittee meetings and field trips were eventually held in only five different locations during the first four months of 1993.

The field trips were successful in letting the enviro and ag representatives see first hand several of the water management problems and techniques presently being employed and investigated by different water suppliers. Water suppliers were asked specific questions on how or if EWMPs could be implemented. Water management operations beneficial for waterfowl were discussed and viewed at a water district in the Sacramento Valley, and endangered species concerns on the operation of a southern San Joaquin Valley groundwater recharge program were discussed and viewed at that site.

Although the field tours were educational and informative, the subcommittee was having a difficult time reaching a consensus on the operative details required for the MOU. There were still serious divisions on what should be

included. During one subcommittee meeting, a proposal was made to let the ag representatives draft their own version of what should be included in the MOU. Following the preparation of this draft MOU the enviros would be given the opportunity to review it and then would work with the ag representatives to try and reach a consensus. This proposal was accepted by the full AB 3616 Advisory Committee and for the next three months the ag representatives worked with a smaller drafting committee to develop a draft ag MOU.

MEETING TO REVIEW DRAFT MOUs

The ag draft MOU was presented to the enviros for their review and comment. The enviros wanted many changes and during the next two months met to revise the ag MOU sections they felt were unacceptable. Many of their concerns were similar to ones expressed earlier. In an attempt to resolve disagreements on an acceptable MOU, a two-day meeting was scheduled to discuss the two draft MOUs and see if some compromises could be reached. The divisions were significant, however, and both groups were skeptical whether an agreement of any type could be reached.

Two people were hired to help facilitate the meeting. An agenda was prepared and ground rules were established before the meeting. There were nearly 50 fifty people in attendance. The meeting began with introductions and opening statements from each side. Then specific areas of disagreement were brought up and discussed. One serious area of disagreement was on the implementation of EWMPs. Enviros were concerned water suppliers would only half heartedly attempt to follow the MOU. There were no assurances water suppliers would make a good faith effort to follow the MOU. They felt a definitive methodology for analyzing the financial and environmental benefits of a practice had to be developed. The application of this methodology would be the basis for a water supplier requesting an exemption from a given practice. The ag representatives could not understand why a typical engineering analysis on the feasibility of implementing a given practice would not be acceptable. They also emphasized there was a need to develop some type of screening criteria to simplify any future agreed to analysis procedure.

After a long period of give and take, one enviro, in an attempt to resolve the deadlock, proposed a simplification of measurement and drainage requirements if there was an agreement to develop a detailed analysis methodology for EWMP implementation. He also suggested an exemption process for the implementation of practices that would include a review of 1) financial feasibility (benefit/cost ratio greater than one), 2) environmental and third

party impact feasibility, and 3) legality. A water supplier would have to implement the practice if it were financially feasible, legal, and also had positive environmental and third party benefits. The practice would not have to be implemented, however, if only one of items 1) or 2) was determined to have positive benefits and was legal. This was a turning point of the meeting. The enviros were saying a practice only had to be implemented if it were cost effective to do so for the water supplier. They did want the water supplier, at a minimum, however, to make an analysis of the environmental and third party impacts to see if consideration should still be given to implementing the practice.

The enviro and ag representatives broke into separate groups to discuss the proposals. The ag group, although skeptical of what might develop, agreed it was best to continue working toward the development of an acceptable MOU. The description of how implementation requirements might be established appeared reasonable and there was a willingness to continue the process. A general Letter of Intent was drafted summarizing the agreements made at the meeting. The primary purpose of the Letter of Intent was to document that "... cooperative efforts to define, approve and implement appropriate water management plans by agricultural water suppliers is desirable and can be beneficial for both agricultural and environmental communities ..." (and that the) participants agree in good faith to attempt to negotiate a Memorandum of Understanding ("MOU") to which both agricultural and environmental organizations can become signatories."

The Letter of Intent memorialized the agreements reached at the meeting and outlined a general framework for proceeding ahead with negotiations and drafting of an MOU. The smaller drafting subcommittee began meeting again. A new draft MOU was developed in accordance with the Letter of Intent. This document became the eventual working document for the final MOU. The development of the MOU went through many rewrites and revisions by the enviro and ag representatives. One of the biggest concerns for the enviros was the need to develop a detailed set of criteria for the screening, evaluation, and potential exemption of EWMPs. Who would or could develop the detailed criteria needed to evaluate the EWMPs? The enviros stated they would not sign the MOU until an acceptable set of criteria had been developed.

ANALYTICAL PROCEDURE TO EVALUATE EWMPs

The Letter of Intent required the development of a rigorous evaluation criteria by which water suppliers would determine the applicability of certain EWMPs. In return, the environmental community agreed they would not insist on the

MOU containing a long prescriptive list of EWMPs that all signatory water suppliers would be required to implement regardless of site specific conditions or resulting economic impacts. The AB 3616 Committee had agreed the evaluation criteria for each EWMP would include a screening procedure which would allow a water supplier to determine if they should implement a given EWMP. This agreement gave water suppliers and enviros certain assurances. Water suppliers would not be expected to implement practices which were not cost effective, and environmental interests would benefit by having screens which required an analysis of environmental and social factors.

The drafting subcommittee was assigned the task of overseeing the development of the criteria for evaluating the EWMPs. Two major points of contention arose. How was a water supplier to arrive at the value of any conserved water, and how were environmental or third party benefits or impacts to be quantified? The subcommittee consulted with agricultural economists from the University of California and private industry to obtain background on these two issues. Environmental members of the subcommittee felt a major study was needed to respond to these concerns. At this time, the California Department of Water Resources expressed a willingness to fund a study to develop potential criteria for the evaluation of EWMPs. DWR had already begun working on the 1998 California Water Plan Update, a report prepared every five years describing the status and needs of water use and supply in California. DWR staff felt the development of criteria for the evaluation of EWMPs would supplement information already being prepared for the 1998 California Water Plan Update. Staff also felt they could incorporate previous work done regarding the evaluation of proposals from water suppliers on low interest loan requests for water management improvements.

This proposal was taken back to the Full Advisory Committee where it was approved and DWR started an intensive two-year process to develop an acceptable evaluation criteria. A new Oversight Subcommittee was formed with a few different members to meet with DWR to review their progress and provide input. DWR concluded that no established criteria existed for quantifying environmental or third party impacts on a monetary basis. In addition, they recommended the value of conserved water should be left to the water supplier to determine, based on whether any conserved water would avoid present or future costs or could be sold to another party.

In consultation with the committee, DWR developed what is now titled the *Net Benefit Analysis* (NBA). This is Exhibit E of the MOU. During the summer and fall of 1995 they asked several water districts throughout the state to utilize the NBA methodology to evaluate EWMPs for their specific circumstances. A major concern voiced by the water suppliers and committee

members was the amount of "paper work" required to complete the evaluation. With this in mind, DWR staff spent several months reorganizing and streamlining the process.

WHAT IS INCLUDED IN THE MOU?

The Final MOU is less complicated than earlier drafts. Section 1 includes definitions for several of the terms used, and Section 2, *Purposes*, consists of the following simple and direct paragraph describing the purposes of the MOU:

The purposes of this MOU are to: (1) create a constructive working relationship between agricultural water suppliers, environmental interest groups, and other interested parties; (2) establish a dynamic list of EWMPs; (3) establish criteria to evaluate the appropriateness of EWMPs; and (4) implement appropriate EWMPs, while avoiding unnecessary or unreasonable planning, paperwork, or expense for water suppliers, thereby voluntarily achieving more efficient water management than currently exists or may be required by existing law.

To address many of the agricultural concerns, Section 3 lists specific limitations on the applicability of the MOU. Some of the limitations are that the MOU will not address on-farm water management, land conversion, land retirement, crop selection, or groundwater production. Also emphasized is that this MOU is not to alter in any way the rights and duties of signatories under existing law.

Every water supplier signatory to the MOU is required to prepare and implement a Water Management Plan (WMP) which will discuss the analysis and implementation of applicable EWMPs. Section 4 outlines the general guidelines for preparing a WMP including exemption criteria for implementing EWMPs, a commitment to good faith effort, submittal of WMPs for endorsement, schedules on implementation, and progress reports.

Section 5 describes the Agricultural Water Management Council which will be established to oversee and coordinate the activities specified in the MOU. The Council will consist of the MOU signatories and will be divided into three groups; (1) Water Suppliers, (2) Environmental Interest Groups, and (3) Other Interested Parties. The Council will initially be housed by DWR and DWR will be responsible for the Council's administrative functions. The Council will attempt to provide assistance to water suppliers in their effort to implement EWMPs. It will review, endorse, or take no action on submitted WMPs. It will prepare and submit reports on signatories' activities, as

appropriate, and it will make recommendations to modify the MOU and/or any of its exhibits as necessary.

Voting to modify the MOU and/or its Exhibits, or to undertake or impose additional responsibilities on signatories, requires a two-thirds vote in favor of the action by both Groups 1 and 2. All other Council actions, including the endorsement of WMPs and Progress Reports requires a simple majority vote of both Groups 1 and 2. Group 3 members can fully participate in Council meetings but they do not have any voting rights under the MOU.

General provisions of the MOU including its effective date, how signatories may withdraw from it, and a strong statement of support for participating signatories are included in Section 6. The MOU also includes exhibits. Exhibit (A) lists all of the EWMPs, (B) and (C) provide guidelines for the development of Water Management Plans and Progress Reports, (D) summarizes a typical Council report outline, and (E) outlines the requirements of the Net Benefit Analysis for the evaluation and implementation of EWMPs.

AB 3616 WORKSHOPS

As the Net Benefit Analysis methodology was being reviewed and modified during the fall and winter of 1995-96, the Oversight Subcommittee discussed the need to hold workshops in the agricultural regions of the state to inform agricultural water suppliers and their respective board members of the history, purpose, and requirements of the draft MOU. The AB 3616 Advisory Committee was well aware of the various details, but the process had been going on for a long time, and many in the agricultural community were not fully aware of the details or requirements.

Seven workshops were held in agricultural areas of the state and one was held in San Francisco during the summer of 1996. The workshops were convened and moderated by the California Farm Water Coalition under contract with DWR. The Coalition prepared a report summarizing the history and purpose of the MOU and made this available to all participants. An attorney from the Natural Heritage Institute, the environmentalists' representative on the Oversight Subcommittee, attended most of the workshops and provided an environmental perspective on the benefits of the MOU.

Various comments and reactions to the MOU were received from agriculture representatives. Concern was mentioned on the time and cost which would be required for some water suppliers to prepare a water management plan pursuant to the MOU. Concern was also expressed regarding the plan to let enviros sit on the Council created by the MOU. The fear was enviros would

be able to deny the endorsement of a water supplier's water management plan with a type of "Russian veto." One manager stated, "I don't want a sandal wearing environmentalist from Berkeley telling me how to manage water in my District." Others wondered why agriculture should consider working in this manner with the environmentalists. Some stated they did not trust the environmental community and the proposed Council would give them access to materials and information which could be used incorrectly against them. "They have done this in the past and would do it again."

The environmental representative responded that the MOU would give the environmental community the opportunity to obtain a better technical understanding of problems related to water management. He felt the MOU would give water suppliers a better understanding of environmental concerns and may help water suppliers reconsider options for better water management. He mentioned the MOU might also provide the opportunity to improve the relationship between environmental and agricultural interests and possibly resolve some of the ongoing water wars.

CALFED, a joint California and Federal program working to establish the best economic and environmental solution for long term water supply and fishery problems in the San Joaquin Delta, became a critical last minute factor in the MOU process. CALFED had established a committee which was reviewing irrigation use efficiency, and a concern was expressed by some agricultural representatives that CALFED might recommend some type of mandatory water management program for water suppliers tributary to or receiving surface water supplies from the San Joaquin Delta. As work on the AB 3616 MOU was nearing completion, many Sacramento and San Joaquin Valley water suppliers would have to consider this possibility when deciding whether to support the MOU.

ADOPTION OF FINAL DRAFT MOU

Following a review of comments received at the summer workshops, the Oversight Subcommittee recommended appropriate revisions to the MOU and DWR submitted the Final Draft to the full AB 3616 Advisory Committee for approval. A final Advisory Committee meeting was scheduled for October 15, 1996. The meeting was attended by approximately fifty agricultural representatives, but only three environmental representatives were in attendance. The Director of the Department of Water Resources, the Mid-Pacific Director of the U.S. Bureau of Reclamation, and the CALFED Executive Director were in attendance and all expressed their support for the MOU. The CALFED Executive Director stated that unless some type of irrigation water use efficiency program for agriculture was established,

CALFED would not be able to move forward with a Delta solution. He said he supported the voluntary AB 3616 MOU as an acceptable water management program. It would provide a "Menu of Actions" for the implementation of reasonable water management practices. If it was not supported by agriculture, however, he said CALFED would have to consider other options.

Many strong statements in support of the MOU were made by Advisory Committee members. Some said urban areas still felt agriculture was not being efficient in its use of water. An endorsed water management plan, prepared pursuant to the MOU, would provide positive public relations regarding the reasonable and beneficial use of agricultural water supplies. This would become critical during the next twenty years as the Sacramento and San Joaquin Valleys' population doubles and existing surface water supplies are unable to meet all of the anticipated urban and agricultural demands. Others mentioned the likelihood that if agriculture did not support this voluntary water management program, a mandatory program would be implemented which would not have the flexibility included in this MOU. The voluntary AB 3616 program would be far preferable.

The Advisory Committee unanimously approved the MOU. DWR said they would print copies of the Final MOU and transmit them to potential signatories during November 1996. The MOU would become effective when at least 15 water suppliers, representing at least two million irrigated acres, became signatories.

WHAT WAS LEARNED?

Several factors contributed to the completion of the MOU. Of prime importance was keeping the AB 3616 Committee focused over the four-year development period. This was accomplished by appointing a chairperson who was able to work with both sides, and who was able to adjust his schedule to accommodate the limited scheduling windows of the Advisory Committee and Oversight Subcommittee. In addition, the process would not have succeeded without the institutional support provided by the California Department of Water Resources. DWR provided compensation to the chairperson and in-house technical and administrative support. This included rewriting and faxing countless drafts of the MOU and related documents to members of all committees so that the process could be expedited and agreements made at pivotal stages.

The AB 3616 Advisory Committee appointed subcommittees to explore areas of agreement and to develop draft materials for the full committee's consideration. The small working groups were vital to the success of the

process and were comprised of individuals with a wide range of expertise. In addition to having experts in water management, there was participation by legal representatives which was advantageous to the success of the process.

Finally, the participants realized that there is no textbook approach to reaching consensus agreements. Several approaches were used throughout the development of the MOU. These included using neutral facilitators to overcome division and conducting field tours to provide committee members with a better understanding of the agricultural and environmental factors that were of concern to the various interest groups.

WILL IT WORK?

For the MOU to succeed, it must be embraced and implemented by agricultural water suppliers. Agriculture realizes that because it utilizes the largest share of the developed water resources in the state, its water use practices will continue to be viewed as if under a public microscope. In light of this scrutiny, agricultural water suppliers are likely to be willing to commit to a process that encourages reasonable water management planning and implementation. If environmental groups do not embrace the MOU, improved water management beyond what already exists may still occur, but the MOU would become an agricultural document alone, and the environmental concerns of water management would not be heard as envisioned.

As mentioned, the current deliberations by urban and agricultural water suppliers, and environmental interests on "fixing" the San Francisco Bay Delta may also encourage agricultural water suppliers to become MOU signatories. This process, referred to as *CALFED* because of state and federal agency participation, is attempting to come up with a solution to balance the Bay-Delta environment, and the urban and agricultural needs dependent on the water supplies that travel through the delta. With the allotment of water supplies at stake, it is likely that water management planning and the implementation of EWMPs will be a component of any proposed solution. This can be either as a voluntary MOU or as a mandatory water conservation requirement of some type. There are many agricultural water suppliers who favor the voluntary approach the MOU offers.

Several questions remain to be answered and will determine the success of the MOU. These include: How will the Council function? Will agricultural water suppliers and environmental representatives be able to work together on the Council as a constructive team? Will the Council be sufficiently funded and organized so that it can effectively carry out its responsibilities? Will the public see the implementation of this voluntary process as evidence that

agricultural water suppliers are being responsible stewards of their water resources? The answers to these questions will determine whether the years of effort and expense in developing the AB 3616 MOU will result in a practical approach for managing California's agricultural water resources.